

REMARKS

Status of the claims:

With the above amendment, claim 1 has been amended. Claims 1-8 are pending and ready for further action on the merits. No new matter has been added by way of the above amendment. Support for the amendment to claim 1 occurs at page 4, line 17. Entry of the amendment and reconsideration in light of the following remarks is respectfully requested.

Rejections under 35 USC §112, first paragraph

Claims 1-7 have been rejected under 35 USC §112, first paragraph as allegedly containing "new matter". Applicants vigorously traverse. The Examiner asserts that there is no support for the phrase "wherein the composition is substantially free of ethylenically unsaturated group-containing monomers", citing *Ex Parte Grasselli*, 231 USPQ 393 (Bd. App. 1983) aff'd 738 F.2d. 453 (Fed. Cir. 1984). First, *Grasselli* is different from the instant case in the following ways.

In *Grasselli*, the Board of Appeals found that a negative limitation for "uranium" (i.e., "said catalyst being free of uranium and the combination of vanadium and phosphorus") could not be used in the claims because the Applicant had not

mentioned uranium at all in the written description. That is not the case in the instant application.

In the instant case, ethylenically unsaturated group-containing monomers is mentioned at page 2, lines 8-9 (as was pointed out in the remarks section of the response of June 5, 2002). Thus, Applicants have positively recited ethylenically unsaturated group-containing monomers. Thus, using *Grasselli* as a basis upon which to reject the claims is completely inapposite.

Further, Applicants at page 2, lines 11-12 explain that these ethylenically unsaturated group-containing monomers suffer the drawback of smell and safety. Then, at page 2, lines 17-18, Applicants explain that one of the objects of the instant invention (which is achieved) is improving the smell and safety of a molded article. By only a small amount of inference, one of skill in the art, in reading the written description, would readily understand that eliminating smell and safety can be achieved by eliminating ethylenically unsaturated group-containing monomers, as is claimed.

Second, in *In re Johnson*, 194 USPQ 187 (CCPA 1977), which is more closely on point to the instant case, the court allowed a negative limitation to a compound when that compound had been disclosed in the written description. Similarly, in the instant case, "ethylenically unsaturated group-containing monomers" is

being omitted when "ethylenically unsaturated group-containing monomers" has been mentioned in the written description. Accordingly, the rejection is inapposite. Withdrawal of the rejection is warranted and respectfully requested.

Further, regarding the use of the word "substantially", this can be considered neither vague nor indefinite. *In Ex Parte Kiser*, 69 USPQ 185 (Bd. Pat. App. & Int. 1946), "substantially free from" was neither vague nor indefinite. Thus, Applicants assert that, in the instant case, the use of "substantially free of ethylenically unsaturated group-containing monomers" would readily be understood by one of skill in the art. Withdrawal of the rejection is warranted and respectfully requested.

Rejections under 35 USC §103

Claims 1-7 have been rejected under 35 USC §103(a) as being unpatentable over Hefner '178 (US Patent No. 4,524,178) in view of JP '160 (JP No. 63-305160).

Present Invention

The present invention relates to a molding composition comprising: (A) an aggregate; at least one of (B) a linear unsaturated polyester and (C) a linear unsaturated polyester polyamide; and (D) a radical generator. Each of Component (B)

and (C) has a content of an alkylene (having from 2 to 4 carbon atoms) oxide adduct of bisphenol A (average added number of mols: 1 to 10) of 3 to 40 mol% based on an amount of constituent monomers of each of said Components (B) and (C). Further, the composition is substantially free of ethylenically unsaturated group-containing monomers.

Disclosure of Hefner '178

Hefner '178 discloses a polyester and polyester-amide alkyds containing no polycycloalkenyl end groups, in admixture with non-resinous vinyl monomers, which are flexibilized by inclusion in the mixtures of about 1 to 20 parts by weight of a polyglycol moiety-comprising, vinyl reactive, urethane oligomer per hundred parts of the alkyd.

Hefner '178 does not teach a composition that is substantially free of ethylenically unsaturated-group containing monomers.

Disclosure of JP '160

JP '160 discloses a composition comprising an unsaturated polyester resin containing at least 1/6 mol hydrogenated bisphenol A glycol and a metal salt of stearic acid. The composition contains at least 1/6 mol hydrogenated bisphenol unsaturated polyester per mol resin to retain heat resistance.

The composition contains 45-35% wt. % crosslinking agent and 55-65% wt. % polyester.

JP '160 does not teach a composition that is substantially free of ethylenically unsaturated group-containing monomers.

Removal of the Rejection over Hefner '178 in view of JP '160

Neither Hefner '178 nor JP '160 or Hefner '178 in view of JP '160 can render obvious the instant invention because they are completely non-analogous art.

Applicants believe that the Examiner is confusing the art of resinous molded materials with the art of matted materials.

The art of resinous molded articles relates to products obtained by molding a composition containing a) a radical-polymerizable monomer (such as styrene) b) a resin such as unsaturated polyester, c) a fibrous reinforcement material, and d) other additives. The art of matted materials, which includes the instant invention relates to products obtained by molding a composition containing a) a resin (such as an unsaturated polyester) b) a fibrous substrate and c) other additives. The art of matted materials generally is free of radical polymerizable monomers.

The art of resinous materials is used to make such objects as purifying tanks, bathtubs and other similar objects, the art of matted materials is used to make such objects as the core of

automobile interiors, muffler plates for air-conditioners, glass mats or other similar materials (all being fibrous molded materials).

Thus, as one of ordinary skill would readily recognized, the two arts are different from each other in both their preparation method (and hence constitution) as well as the physical properties of their respective starting materials.

Referring first to the preparation method, the resinous molded article of the cited art is prepared by impregnating a fibrous reinforcement material thoroughly with a resin to obtain a paste-like fluidic composition, injecting the composition into a proper mold or the like, and then thermally setting the composition. Thus, the resin to be used needs to have a low viscosity yet at the same time remain a liquid. The resin used is a low molecular weight resin. The resin is dissolved in an easily thermosetting radical-polymerizable monomer such as styrene before use.

Accordingly, the resin in this art is designed so that it does not exhibit the desired strength per se but rather exhibits a desired strength when combined with styrene. Moreover, the two arts are different in the amount of resin solution to be used. In other words, in the resinous molded art, a large amount of resin solution is used for reinforcement material.

In contrast, in the art of matted molded articles, as disclosed in the instant invention, the fibrous substrate is bound at contact. The desired strength can be attained by the use of a small amount of a binder. Thus, the resin to be used needs to have high molecular weight and high adhesion to the binder. Accordingly, as previously mentioned, the matted molded article is normally prepared by spraying a solid resin powder or by dispersion thereof in water (or by a similar method), at which point the fibrous substrate is then hot-pressed. This is in opposition to the method of the resinous art.

In this way, the resins of the two arts are quite different from each other in their physical properties. Thus, one of skill in the art would recognize when a resin for resinous molded article is used to prepare a matted molded article for the mere reason that the name of the resins used in the two arts are the same, that is, polyester, the resulting molded article cannot exhibit satisfactory properties.

Applicants further assert that the Examiner has failed to make out a *prima facie* case of obviousness with regard to the 35 USC §103(a) rejection over Hefner '178 in view of JP '160. Three criteria must be met to make out a *prima facie* case of obviousness.

- 1) There must be some suggestion or motivation, either in the references themselves or in the knowledge generally available

to one of ordinary skill in the art, to modify the reference or to combine reference teachings.

- 2) There must be a reasonable expectation of success.
- 3) The prior art reference (or references when combined) must teach or suggest all the claim limitations.

See MPEP §2142 and *In re Vaeck*, 20 USPQ2d 1438 (Fed. Cir. 1991). In particular, the Examiner has failed to meet the first element to make a *prima facie* obviousness rejection. In particular, Applicants assert that there is no suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings to arrive at the instant invention. One would not use the resinous molded article art, as disclosed by the teachings of Hefner '178 and JP '160, to arrive at the instant invention in the matted molded article art.

The inventors of the instant invention undertook an extensive search for patent data on art related to the instant invention. This extensive search showed that although there are many applications in the art of resinous molded article comprising a polyester resin containing a styrene monomer, there are very few applications (two, to be precise) involving the incorporation of polyester in the art of matted molded article. The two patents that did come up in this art are Japanese Patent

Laid-Open No..1993-169475 (JP-A-5-169475), which is described in "background of the invention" of the present application, and Japanese Patent Laid-Open No. 1994-9796 (JP-A-6-9796), which was found after the filing of the instant application (and is now submitted as an IDS).

Further, even if Hefner '178 in view of JP '160 were able to support a *prima facie* obviousness rejection (which Applicants do not concede), the instant invention has unexpected advantages that could not be surmised by the teachings of Hefner '178 in view of JP '160. In particular, the materials as disclosed in Hefner '178 and JP '160 can not be used for the products made by the instant invention.

For the reasons above, Hefner '178 in view of JP '160 can not render obvious the instant invention. The rejection is inapposite. Withdrawal of the rejection is warranted and respectfully requested.

Conclusion

With the above remarks and amendments, it is believed that the claims, as they now stand, define patentable subject matter such that a passage of the instant invention to allowance is warranted. A Notice to that effect is earnestly solicited.

If any questions remain regarding the above matters, please contact Applicant's representative, T. Benjamin Schroeder (Reg.

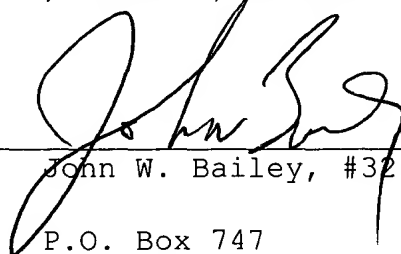
No. 50,990), in the Washington metropolitan area at the phone number listed below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

The claims have been amended as follows:

1. (Twice Amended) A molding composition comprising:

(B) an aggregate;

at least one of (B) a linear unsaturated polyester and (C) a linear unsaturated polyester polyamide; and

(D) a radical generator,

wherein each of Component (B) and (C) has a content of an alkylene (having from 2 to 4 carbon atoms) oxide adduct of bisphenol A (average added number of mols: 1 to 10) of 3 to [50] 40 mol% based on an amount of constituent monomers of each of said Components (B) and (C) wherein the composition is substantially free of ethylenically unsaturated group-containing monomers.